

this study. The facilities of the Herbarium of the University of California were made available through the kindness of Dr. H. L. Mason, Director. The author wishes to thank the curators of the United States National Herbarium, the Dudley Herbarium, Stanford University, and the Herbarium of the California Academy of Sciences, San Francisco, for the opportunity of studying specimens from these collections.

Ames, Iowa.

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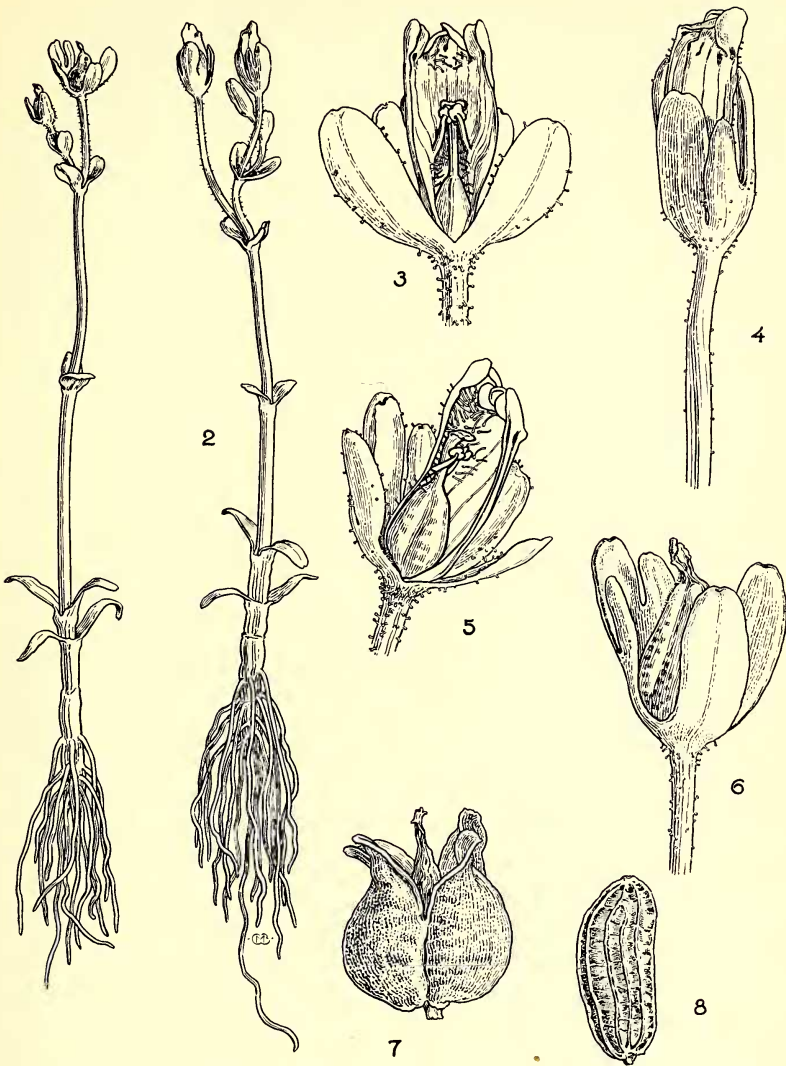
### A NEW GRATIOLA FROM BOGGS LAKE, LAKE COUNTY, CALIFORNIA

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In April, 1923, J. W. Blankenship collected material of a species of *Gratiola* which he was unable to identify in the current manuals. He sent specimens to W. L. Jepson for identification. In the Jepson herbarium, the Blankenship specimens represent three collections all labeled "Kelseyville, Lake County." In one of these collections, that of May 21, 1929, Kelseyville is stricken out and "Bogg's Lake" inserted, presumably by Blankenship. Jepson drew up a description and gave the species a manuscript name descriptive of recurved pedicels, a character which in the Blankenship specimens apparently resulted from his failure to press the specimens immediately, for the pedicels are in reality erect. In the Jepson manuscript, there is pencilled the annotation in Jepson's handwriting, "any good?" which attests Jepson's later doubt as to the distinctness of his proposed species. Jepson apparently never saw the plants in the field. This species was rediscovered at Boggs Lake by the writers in 1953. Because of the inappropriateness and misleading character of the Jepson manuscript name, we do not adopt it but propose another.

The plants occur mostly as scattered individuals in the marginal waters of the seasonally receding shoreline of Boggs Lake at the west base of Mount Hanna in Lake County, California, at an elevation of 2900 feet. Often they stand out as single, erect, yellow-flowered individuals in a mass of the coarse, prostrate, white-flowered *Gratiola ebracteata* Benth. In only a few cases were the plants found aggregated in groups of more than one or two individuals. Such groups were in depressions made by the hoofs of cattle and might well reflect the aggregation and pressing into the mud of mature and still filled capsules of the previous season.

*Gratiola heterosepala* Mason & Bacigalupi sp. nov. A *Gratiola ebracteata* foliis superioribus obtusis nonnumquam emarginatis calyce in-



FIGS. 1-8. *Gratiola heterosepala*. 1, 2, habit,  $\times 1$ , note glandular hairs in inflorescence; 3, flower, front view, lower lip removed,  $\times 3$ ; 4, flower, lateral view,  $\times 3$ ; 5, flower, side view,  $\times 4$ ; 6, young capsule,  $\times 3$ ; 7, capsule,  $\times 5$ ; 8, seed,  $\times 33$ . (Drawn from Mason & Bacigalupi 14,544.)

aequaliter sepalis tribus superioribus connatis fissis corolla aurata labio eius inferiore albo discedit.

Erect amphibious annual herb; stems 2-10 cm. high, stout and fistulose below, slender above, conspicuously striate, glabrous below, pubescent in the inflorescence with glandular-capitate hairs; leaves decussately oppo-

site, lowermost linear-lanceolate, although appearing as though connate, the blade not clasping the stem, 1–2 cm. long, middle leaves much shorter, oblong, the upper obovate, rounded or emarginate, 2–5 mm. long; flowers few on slender erect ebracteate glandular-pubescent pedicels; calyx unequally cleft, the two lower sepals distinct, 4–6 mm. long, oblong, obtuse and emarginate; the three upper sepals joined for one-third of their length or more, the 2 lateral shorter and narrower, the middle lobe broadly oblong, emarginate; corolla tubular, the tube somewhat curved, quadrate, exceeding the calyx, 6–8 mm. long, pilose with gland-tipped hairs externally, a few simple hairs below the stamen-insertion within, 5-lobed, yellow, its lobes 1–2 mm. long, the upper pair of lobes joined nearly to the tip, yellow, the lower three free to the base, white; stamens 2 on short slender filaments, inserted about midway on the tube below the upper pair of petals, the anthers versatile, the sacs slightly unequal; ovary inserted on a thin annular disc, pyriform, 2–3 mm. long, style 1.5–2 mm. long, stigma asymmetrically 2-lobed, the shorter lobe folded against the base of the longer; capsule pyriform, about equaling the persistent calyx; seeds oblong, longitudinally ribbed and with indistinct horizontal ribs.

In shallow water on the southwest margins of Boggs Lake, Lake County, California, *Mason and Bacigalupi 14,544*, June 8, 1953 (type, UC 985639; Kelseyville [?] *Blankenship*, April 26, 1923, and May 25, 1929 (JEPS); Boggs Lake, *Blankenship*, May 21, 1929 (JEPS).

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## A NEW SPECIES OF HELIOPSIS FROM BAJA CALIFORNIA, MEXICO

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In 1951, a taxonomic study was begun on the genus *Heliopsis* of the Compositae. During the course of this study a previously undescribed species was discovered.

***Heliopsis rubra* sp. nov.** Herba perennis erecta vel ascendens, 50–75 cm. alta; caulis ad basem versus glaber supra, sparse pubescens; folia rhomboideo-deltaidea, integra vel dentibus acutis mucronatis, sparse dentata, 3.5–5.0 cm. lata, 6.5–12.0 cm. longa; petioli hirsuti; capitula 1.0–1.5 cm. lata, 1.0–1.8 cm. alta; involucra 2-seriata, phyllaria adpressa; radii 8–10, aurei; corollae disci flavae; paleae oblongo-lanceolatae rubrae eae senescentes fulvae; radii achenia triangularia, 4.0–5.0 mm. longa, irregulariter tuberculata; achenia disci quadrangularia.

Erect or ascending biennial or perennial herb in mountainous regions, annual in plains regions, 50–75 cm. tall, branched nearly to woody base; stems 0.5–3.5 mm. thick, glabrous below, sparingly pubescent above, previous years' stems glaucous, periderm flaking with age; axils of lateral branches and leaves densely tomentose; internodes 3.5–6.5 cm. long;